

**IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION**

QUARTZ AUTO TECHNOLOGIES LLC,

Plaintiff,

v.

GRUBHUB HOLDINGS INC.,

Defendant.

Case No. 21-CV-1545

JURY TRIAL DEMANDED

**DEFENDANT GRUBHUB HOLDINGS INC.'S FED. R. CIV. P. 12(C)
MOTION FOR JUDGMENT ON THE PLEADINGS**

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I. INTRODUCTION

Each asserted patent claim in this case is invalid under 35 U.S.C. § 101 for being directed to unpatentable subject matter. Indeed, all three patents—U.S. Patent Nos. 7,370,085 (“’085 Patent”); 6,446,004 (“’004 Patent”); and 7,958,215 (“’215 Patent”) (collectively, “Asserted Patents”—suffer from the same flaw of using conventional computer elements performing well-known functions to capture the following abstract ideas: generating and processing user positions to determine whether speed or acceleration indicates a predefined activity (’085 Patent); performing an activity when arriving within a certain proximity of a location (’004 Patent); and managing IT devices by automatically assigning candidates to respond to problems (’215 Patent). Because there is nothing inventive about these abstract ideas or their implementation, the asserted claims are ineligible under 35 U.S.C. § 101.

II. FACTUAL AND PROCEDURAL BACKGROUND

Quartz sued Grubhub in this District alleging that various features of Grubhub’s mobile application to facilitate delivery by independent contractors infringes the Asserted Patents. DE 1. Quartz filed an Amended Complaint (DE 30), Grubhub timely answered and filed counterclaims (DE 40), and Quartz responded (DE 42). Quartz is asserting Claims 1, 2, 9, 10, 15, and 16 of the ’085 Patent; Claims 1, 2, 8, 11–13, 17, and 18 of the ’004 Patent; and Claims 5, 7, 8, and 14–16 of the ’215 Patent. Ex. 1 at 1. Quartz opposes this motion.

III. LEGAL STANDARDS

Under Federal Rule of Civil Procedure (“FRCP”) 12(c), a party may move for judgment on the pleadings after the “complaint and answer have been filed.” *Buchanan-Moore v County of Milwaukee*, 570 F.3d 824, 827 (7th Cir. 2009). The standard applied to Rule 12(c) motions is the same standard applied to FRCP 12(b)(6) dismissals. *Id.* This standard is properly applied to questions of 35 U.S.C. § 101 patent-eligibility. *PersonalWeb Techs. LLC v. Google LLC*, 8 F.4th 1310, 1314, 1319 (Fed. Cir. 2021). To determine patent-ineligibility, the Court may focus on a representative claim where all claims

are “substantially similar and linked to the same abstract idea.” *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat. Ass’n*, 776 F.3d 1343, 1348–49 (Fed. Cir. 2014). Claim construction is not required. *Id.* at 1349.

The Supreme Court has constructed a two-step framework (the *Alice* framework) to determine patent-ineligibility pursuant to § 101. *See generally Alice Corp. Pty. v. CLS Bank Int’l.*, 573 U.S. 208 (2014). The first step under the *Alice* framework is to determine if a patent claim is directed to ineligible subject matter, such as an abstract idea, by focusing on the claim’s “character as a whole.” *See Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016). “In cases involving software innovations, this inquiry often turns on whether the claims focus on specific asserted improvements in computer capabilities or instead on a process or system that qualifies an abstract idea for which computers are invoked merely as a tool.” *TecSec, Inc. v. Adobe Inc.*, 978 F.3d 1278, 1293 (Fed. Cir. 2020). The second step is to determine if a patent claim “contains an inventive concept sufficient to transform the claimed abstract idea into a patent-eligible application.” *Alice*, 573 U.S. at 217, 221. For the role of a computer in a computer-implemented invention to be deemed meaningful in the context of this analysis, it must involve more than performance of “well-understood, routine, [and] conventional activities previously known to the industry.” *Content Extraction & Wells Fargo Bank, Nat’l Ass’n*, 776 F.3d 1343, 1347–48 (Fed. Cir. 2014). Where the claims merely recite an “application of an abstract idea using conventional and well-understood techniques,” there is no inventive concept as a matter of law. *BSG Tech LLC v. Buyseasons, Inc.*, 899 F.3d 1281, 1290 (Fed. Cir. 2018).

IV. ARGUMENT

A. The ’085 Patent Lacks Patent-Eligible Subject Matter

The ’085 Patent, filed in 2001, relates to “providing user location information with a personal information management [(PIM)] program.” DE 1.2 (’085 Patent) at 1:25–27. The inventors recognized that the FCC had “mandated” that cellular phones include technology, e.g., GPS, to determine locations.

Id. at 4:3–11. The patent describes processing that location information to determine whether the user is engaged in some predefined activity, e.g., “an activity involving movement from one location to another” such as traveling in a vehicle, “walking, running, bicycle riding, etc.,” or the absence of movement, e.g., that the user is “stuck in traffic.” *Id.* at 9:38–65, 12:10–12. The stated goal was to “provide a tool to allow people to review their actual activity and movement and compare with planned goals or scheduled events” to enable people “to more optimally allocate their time.” *Id.* at 2:59–3:5. The claims, however, are directed to abstract steps, require nothing more than well-understood and conventional technologies performing their known functions, and fail to actually recite any technological improvement.

1. *Claim 1 of the '085 Patent is Representative*

Claim 1, the only asserted independent claim, is representative. All remaining asserted claims depend from Claim 1, are substantially similar, and recite the same information-based abstract idea. They each recite abstract steps related to receiving/transmitting, storing, processing, generating, and displaying information. Claim 2 requires that the information is processed in a database, and includes generic steps directed at receiving and storing data. Claims 9 and 10 require receiving a request from a user for a selected time interval, and then include the same generic steps of determining, generating, transmitting, and displaying information. Claims 15 and 16 add further generic steps of “generating information on the predefined activity and the locations” and “generating a record associating” the locations with the activity, respectively.

2. *Alice Step One*

The asserted claims of the '085 Patent are directed to the abstract idea of generating and processing user positions to determine whether speed or acceleration indicates a predefined activity for a PIM program. As the inventors themselves stated during prosecution of a related continuation: “The claims issued in U.S. Pat. No. 7,370,085 are directed to gathering and processing position coordinates.” Ex. 2 at 10. These concepts “fall into a familiar class” of claims directed to “information-based abstract

ideas,” e.g., generating, collecting, processing, storing, and displaying information, that have long been held ineligible. *See Elec. Power Grp. v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016) (finding claims focused on “collecting information, analyzing it, and displaying certain results” directed to an abstract idea). As the Federal Circuit has explained, “[i]nformation as such is an intangible,” and collecting information, analyzing or processing information “by steps people go through in their minds, or by mathematical algorithms,” and displaying it are all abstract ideas. *Id.* at 1353–54 (collecting cases); *see also Content Extraction*, 776 F.3d at 1347; *Gaelco v. Arachnid 360 LLC*, 293 F. Supp. 3d 783, 790 (N.D. Ill., 2017) (“this Court finds collecting information, analyzing it, and displaying results to be ‘abstract-idea processes’ under *Alice*”), *aff’d*, 742 F. App’x. 512 (Fed. Cir. 2018).

Generating information (position and time data) is abstract because information is intangible, and the claims provide no limitations on, or a description of, how that information is generated. *Elec. Power Grp.*, 830 F.3d at 1353–54. Further, monitoring and recording the locations of people is undisputedly a long-standing human practice, which confirms the abstract nature of these claims. *Intellectual Ventures LLC v. Symantec Corp.*, 838 F.3d 1307, 1314, n.5 (Fed. Cir. 2016) (explaining “a wide variety of well-known and other activities constitute abstract ideas,” including “long-prevalent” human practices).

The second step of processing that information to calculate speed or acceleration from position and time information is a simple, well-known calculation that people can perform in their minds or with pen and paper.¹ *Id.* Determining whether speed or acceleration indicates an activity is likewise abstract. The specification describes this step as determining whether the “user was engaged in an activity involving movement from one location to another” (e.g., walking, running, or riding in a vehicle), ’085 Patent at 9:38–65, and even determining that the user was not moving (e.g., “stuck in traffic”) is

¹ The term “a rate of change in distance per unit of time in a series of position coordinates at times” was construed to mean “**speed** determined from a series of position and time coordinates.” *See Quartz Auto Techs., LLC v. Lyft, Inc.*, No. 1:20-CV-00719, Dkt. 94 at 5 (emphasis added). While Grubhub reserves the right to argue that the term refers to “acceleration” and not “speed,” this does not change patent-eligibility analysis.

embodied by the broad claim language. *Id.* at 12:10–12. Moreover, Claim 1 provides no details on how these steps are to be performed, raising serious preemption concerns. *Alice Corp. v. CLS Bank Int'l*, 573 U.S. 208, 216 (2014). In fact, Claim 1 is so broad that it encompasses a person generating position and time data simply by watching someone regularly pass by a window and determining, based on the intervals at which the person passes, whether the person is walking, running, or riding a bike around the block. That Claim 1 requires generating information about the “determined” activity “does not change its character as information.” *Elec. Power Grp.*, 830 F.3d at 1353. As the Federal Circuit explained in *RecogniCorp, LLC v. Nintendo Co.*, “[a] process that started with data, added an algorithm, and ended with a new form of data was directed to an abstract idea.” 855 F.3d 1322, 1326–27 (Fed. Cir. 2017).

The same applies here.

The additional generating, processing, receiving, storing, transmitting, and displaying steps recited in the dependent claims are simply more of the same. “[T]he focus of the claims is not on [] an improvement in computers as tools, but on certain independently abstract ideas that use computers as tools.” *Elec. Power Grp.*, 830 F.3d at 1354 (holding ineligible claims “focused on the combination of those abstract-idea processes”). To the extent the recited “wireless device” and “personal information management program” limits the claims to a particular technology,² “that does not make the claims any less abstract.” *In re TLI Commc'n's Patent Litig.*, 823 F.3d 607, 613 (Fed. Cir. 2016).

3. Alice Step Two

The claims rely on “well-understood, routine, [and] conventional activities” of generating, processing, storing, and transmitting information. *Content Extraction*, 776 F.3d at 1347–48. They “do not even require a new source or type of information, [] new techniques for analyzing it,” or “any

² Another court found Claim 1’s preamble limiting and the term “personal information management program” (PIM) to have its plain and ordinary meaning. *See Quartz Auto Techs., LLC v. Lyft, Inc.*, No. 1:20-CV-00719, Dkt. 94 at 4 (W.D. Tex.). According to the specification, a PIM “refers to a program designed to allow users to organize random bits of information in a useful format.” ’085 Patent at 4:30–45.

assertedly inventive programming.” *Elec. Power Grp.*, 830 F.3d at 1355. Moreover, the recited activities are performed by wholly conventional components, e.g., a wireless device, a server, and a database. Although “an inventive concept can be found in the non-conventional and non-generic arrangement of known, conventional pieces,” the arrangement must be aimed at a “technical solution.” *Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1151–52 (Fed. Cir. 2016). As in *Synopsys*, the ’085 Patent claims lack an inventive concept because they “do not introduce a technical advance or improvement.” *Id.* at 1152.

According to the preamble of Claim 1, the asserted claims are intended to provide user location information for a PIM program. The specification explains that PIM programs were well known, conventional, and some of the “most popular mobile applications” for wireless devices. ’085 Patent at 1:29–41. The specification also explains that the “user location information” could be generated by conventional GPS or “any known location positioning technology in a manner known in the art.” *Id.* at 3:56–4:14. Yet neither the specification nor the claim contains any details regarding *how* the information improves the functioning of a wireless device or a conventional PIM program.

The additional receiving, transmitting, storing, and displaying steps of the dependent claims add nothing more. As the specification states, the “embodiments of the invention are implemented” in a generic “wireless computing environment” that includes a conventional wireless device (e.g., “cellular phone, personal digital assistant (PDA), hand held computer, palm computer, etc.”), one or more servers (e.g., “one or more server class machines known in the art”), and a network that “may comprise any collection of devices, routers, etc. used to transmit data.” *Id.* at 3:36–55. The data may be transmitted and received using “any known wireless transmission technology.” *Id.* The information may be stored “using any database technology known in the art.” *Id.* at 4:49–51. And information can be displayed using “any electronic display device known in the art.” *Id.* at 4:24–27. No new techniques are required—

“the described aspects of the invention” may be implemented “using standard programming and/or engineering techniques to produce software, firmware, hardware, or any combination thereof.” *Id.* at 11:13–18. The claims are thus unlimited by any specific implementation, and “they do not include any requirement for performing the claimed functions . . . by use of anything but entirely conventional, generic technology.” *Elec. Power Grp.*, 830 F.3d at 1356.

B. The ’004 Patent Lacks Patent-Eligible Subject Matter

The ’004 Patent, filed in 2001, states that the invention is in “the field of location dependent data processing.” DE 1.1 (’004 Patent) at 1:17–22. Due to the popularity of “Internet based services” and “e-commerce applications,” the specification asserts a generic need for using “proximity and/or locations” to “facilitat[e] the communication between a user and a computer system.” ’004 Patent at 1:26–35. It purports to advance this need with a “system and associated method that allow particular requests to be executed at some point in the future without specifying the exact time or necessarily a precise location.”³ ’004 Patent at Abstract. The patent explains that the integration of mobile phones, PDAs, and GPS systems allow “smart devices” to perform an activity based on its proximity to a location. ’004 Patent at 1:26–35. The claims, however, merely recite abstract concepts without any technical innovation and do not claim “smart devices.”

1. *Claim 1 of the ’004 Patent is Representative*

Claim 1 is representative. All other asserted claims are substantially similar and are linked to the same abstract idea of performing an activity when within a proximity of a location. Independent Claim 12—the only other asserted independent claim—is a system claim which is nearly identical to Claim 1, adding only “a calendar module for specifying an activity” and the use of a generic “server” and “mobile

³ For example, it describes a user who wants to watch a movie at a movie theater but does not know “what is the best time or location to watch the movie.” ’004 Patent at 1:46–50. The patent describes that the user’s mobile computing device executes the request (to purchase movie ticket) when her device is within a certain proximity (threshold distance) of a location (movie theater). ’004 Patent at 2:8–16; 2:53–60; Table 1.

computing device.” The “calendar module” of Claim 12 is directed to the same concept, adding only a calendar as the place to specify the activity recited in Claim 1. The asserted dependent claims each recite abstract steps related to transmitting and processing information, or downloading and executing software. Claim 2 recites data transmission, and Claims 11 and 13 recite determining a location, both of which are patent-ineligible abstract ideas, as explained below. The addition in Claim 11 of a “GPS coordinate frame,” was a well-known, routine, and conventional component at the time of the purported invention and does not add anything more to the abstract idea itself. Claims 8 and 17–18 each recite downloading or executing non-specified software code—each being conventional computer functions. The additions in Claims 8 and 18 of “anti-hysteresis” code to prevent duplication is a function long performed by humans (e.g., “instruct the system 10 not to automatically duplicate a previous transaction,” such as not purchasing a second movie ticket (’004 Patent at 12:48–62)). This is likewise ineligible.

2. *Alice Step One*

Claim 1 is directed to the abstract idea of performing an activity when within a proximity of a location. This is a longstanding human practice; indeed, it is a common scenario for a person driving near a grocery store to stop and purchase an item such as milk when they discover (e.g., via a sign) that they are in the vicinity of a convenience store that carries the item. Claims directed to human practices are routinely found ineligible. *See, e.g., Intellectual Ventures*, 838 F.3d at 1313–14 (holding claims directed to abstract idea of “filtering e-mails that have unwanted content” because “it was long-prevalent practice for people receiving paper mail”). Much like the abstract and ineligible claims in *BroadSoft, Inc. v. CallWave Commc’ns, LLC*, Claim 1 is directed to the human activity of performing an activity when prompted by a condition. 282 F. Supp. 3d 771, 780-81 (D. Del. 2017). Here, the stored condition is location-based, and courts have found similar location-based processing to be abstract. *See Jedi Techs., Inc. v. Spark Networks, Inc.*, 2017 WL 3315279 (D. Del. Aug. 3, 2017) (matching people based on

location is an abstract idea); *Nagravision SA et al v. NFL Enter., LLC*, 2018 WL 1807285, at *16 (C.D. Cal. Mar. 9, 2018) (finding managing content based on “geographic location” to be abstract).

The claims recite “broad and familiar concept[s]” routinely performed by humans and using functional language “untethered to any specific or concrete” implementation. *Affinity Labs of Tex., LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1258 (Fed. Cir. 2016). Like the claims in *AffinityLabs*, the ’004 Patent’s asserted claims are “entirely functional in nature” and “are not directed to a solution to a ‘technological problem.’” 838 F.3d at 1258, 1261. “There is nothing in claim 1 that is directed to *how to* perform an activity when within a certain proximity of a physical location, or even what activity is performed. *See id.* at 1258. “Rather, the claim is drawn to the idea itself” of performing activities, as generically implemented on a computer. *Id.* “Mere automation of manual processes using generic computers does not constitute a patentable improvement in computer technology.” *Credit Acceptance Corp. v. Westlake Servs.*, 859 F.3d 1044, 1055 (Fed. Cir. 2017). The claims are not limited to any means for performing the functions, but rather recite executing generic software code, which is yet another “quintessential ‘do it on a computer’ patent.” *Univ. of Fla. Research Found., Inc. v. Gen. Elec. Co.*, 916 F.3d 1363, 1367 (Fed. Cir. 2019).

The ’004 Patent does not purport to have invented “smart devices,” and instead recites routine “mobile computing devices,” “servers,” and communication between them. ’004 Patent at 3:18–22. The claims do not require the use of a specific computing device or software to perform the claimed functions. Even limiting the claims to a particular technical environment, such as “internet based services and derived e-commerce applications” (’004 Patent at 1:26–35)), “does not make the claims any less abstract.” *In re TLI*, 823 F.3d at 613.

3. Alice Step Two

The ’004 Patent claims recite broad and well-known tasks (e.g., executing software code, determining proximity to a location) for which a computer is used in its ordinary capacity and does not

require the use of inventive technologies to perform any steps. The patent describes components which were well-known, routine, and conventional, such as a mobile computing device, servers, and GPS. Nothing in the specification suggests that these components are anything more than generic devices; for example, that the mobile computing device is anything more than a generic device capable of communicating wirelessly, using GPS, and storing and executing software. *See* '004 Patent at 6:17–26; Fig. 3; *see also* '004 Patent at 1:26–35.

It is not inventive under § 101 to purchase an item from a grocery store when driving near a store that carries that item, or to purchase tickets from the closest movie theater. The “well-understood techniques” of having a computer perform a task (e.g., executing software code to, for example, make a purchase at a nearby location) when prompted by a stored command amounts to no more than the “application of an abstract idea using conventional and well-understood techniques,” which has no inventive concept as a matter of law. *BSG Tech LLC v. Buyseasons, Inc.*, 899 F.3d 1281, 1290 (Fed. Cir. 2018). The specification does not state that the patent claims a new technique for triggering software execution, nor a new type of executable software code.

Claim 1’s other elements only add “well-understood, routine, and conventional activities.” *See Content Extraction*, 776 F.3d at 1347–48. “Specifying an activity” is akin to writing a note to oneself to pick up milk at a grocery store on the way home. It is likewise immaterial that Claim 12 recites the use of a “calendar module” for performing this step: a “calendar” is ancient, and a “calendar module” is a conventional component of a wireless device. That the “calendar module” does not add an inventive concept is underscored by the specification’s broad explanation of a “calendar module” as something that “tracks the user’s present and future plans and activities.” '004 Patent at 3:23–26. The recited “storing” executable software and “transmitting an address” are also generic computer tasks that do not transform the claims into patent-eligible subject matter. *See Rothschild Location Techs. LLC v. Geotab*

USA, Inc., 2016 WL 2847975 at *3 (finding “‘transmitting’ task may be performed using ‘any … type of communication protocol[] or system[] currently existing or to be developed for wirelessly transmitting data’”).

C. The ’215 Patent Lacks Patent-Eligible Subject Matter

The ’215 Patent, filed on February 12, 2003, states that the “present invention provides a method of improving the response time to IT problems and ensuring that someone will respond to a problem.” DE 1.3 (’215 Patent) at Abstract, 1:13–23, 1:60–2:1. It further explains that conventional IT management systems could “send out an email to an administrator should a problem arise” but suffered from a “delay between the time the administrator receives the email and the time they actually read it.” *Id.* at 1:36–47. “Another problem with [these] conventional notifications systems” is that they do not provide “real-time” communications. *Id.* at 1:48– 59.

To solve these problems, the inventors used existing, commercially available “instant messaging technology,” such as “Lotus Sametime,” to replace email. *Id.* at 1:6–10, 4:60–65, 5:51–6:6, 8:26–36. Most of the claims are not limited to the use of instant messaging—the alleged improvement. While the claims recite “receiving an alert from a managed information technology device,” they are not directed to any improvement in or to such a device. Indeed, a conventional managed IT device may include “a simple sensor that generates an alert when a variable exceeds a set point,” *id.* at 6:57–63, and such devices were already in use with “conventional notification systems.” *Id.* at 1:48–59; *see also id.* at 2:52–59 (“conventional management methods and systems”); 8:45–53 (use of existing “real-time” instant messaging programs offers “advantages over conventional IT management techniques”). During prosecution, the inventors relied on automation and implementation on a computer to distinguish over the art.⁴ As in many pre-*Alice* computer-implemented method patents, the ’215 Patent relies on computer

⁴ In responding to a non-final rejection of all claims as anticipated, the inventors amended the independent claims to recite “computer-implemented” in the preamble and “automatically” before select claim limitations. Exs. 3,

automation as the point of novelty, which is insufficient to create patent-eligibility. *Credit Acceptance*, 859 F.3d at 1055.

1. *Claim 5 of the '215 Patent is Representative*

Claim 5 is representative and does not require real-time communication—the alleged innovation over the pre-existing use of email. *See '215 Patent at Abstract, 1:6–10, 2:12–21, 3:24–44, 4:1–16, 5:51–6:6.* There are no details regarding how the steps are performed. Claim 7 recites that selecting a candidate includes determining more than one qualified person and choosing one, again with no details on how. Claim 8 requires determining who is closest to the managed IT device. Independent Claim 14 is nearly identical to Claim 5 but requires the use of instant messages. Claim 15 adds that if an instant message is not received from the first candidate within a selected time period, it will detect a second candidate. Finally, Claim 16 adds using conventional online awareness capabilities in determining availability. *See id.* at 4:49–65, 5:51–6:6.

2. *Alice Step One*

The '215 claims are directed to the abstract idea of managing IT devices by assigning responsibility for problems to someone qualified and available to respond. Assigning responsibility for problems is a longstanding human practice and a known method of organizing human activity, the latter of which is an abstract idea. *See BSG Tech*, 899 F.3d at 1285–86. Indeed, the specification acknowledges that this was done prior to the claimed invention. *See '215 Patent at 1:36–38* (describing prior use of email to practice the claimed invention). We have all used this same process when trying to assign someone responsibility. Your dishwasher fails, and the blinking lights alert you there is a problem. You start calling repair technicians until you find one who is available and certified for your brand of

4. The inventors then argued on appeal that the cited prior art disclosed a “human user” that “manually” performed certain steps. Ex. 5 at 9. That prior art, argued the inventors, could not anticipate their claims, which “require that various acts be performed ‘automatically’ as part of a ‘computer-implemented method.’” *Id.* at 9–11. The Board agreed, and the Examiner allowed the claims without further consideration. Exs. 6 at 2–3; 7.

dishwasher, and they confirm an appointment. If they fail to show up or to respond to your call, you call someone else who is available and qualified. The '215 Patent simply applies this longstanding practice in the context of a malfunctioning IT device. Assigning responsibility for problems, like “[c]ontrolling access to resources,” “is exactly the sort of process that ‘can be performed in the human mind, or by a human using a pen and paper,’ which we have repeatedly found unpatentable.” *See Ericsson Inc. v. TCL Commc'n Tech. Holdings Ltd.*, 955 F.3d 1317, 1327 (Fed. Cir. 2020).

The '215 Patent's claims also *fail to recite a technological solution to anything*. “Mere automation of manual processes using generic computers does not constitute a patentable improvement in computer technology.” *Credit Acceptance*, 859 F.3d at 1055; *see also Gaelco*, 293 F. Supp.3d at 794 (noting that automating pre-existing activities using conventional computers “is not an inventive concept.”). Quartz cannot now rely on automating certain steps using a computer as the inventors did during prosecution. And “merely limiting the field of use of the abstract idea to a particular existing technological environment,” e.g., managing IT devices, “does not render the claims any less abstract.” *See Twilio, Inc. v. Telesign Corp.*, 249 F. Supp. 3d 1123, 1144 (N.D. Cal. 2017). Additionally, functional claims that lack “any particular assertedly inventive technology for performing those functions” are directed to an abstract idea rather than a technological improvement. *See Elec. Power Grp.*, 830 F.3d at 1353–54. To make that determination, courts have “relied on the distinction made in *Alice* between, on one hand, computer-functionality improvements and, on the other, uses of existing computers as tools in aid of processes focused on ‘abstract ideas.’” *Id.* The '215 Patent's claims fall in the latter category.

The '215 Patent “is a quintessential ‘do it on a computer’ patent.” *Univ. of Fla.*, 916 F.3d at 1367. Claims to a system that, “[u]pon the occurrence of an event, . . . determines what tasks need to be accomplished . . . and assigns those tasks to various authorized individuals to complete them” are abstract and patent-ineligible. *Accenture Glob. Servs., GmbH v. Guidewire Software, Inc.*, 728 F.3d 1336, 1338

(Fed. Cir. 2013). Other courts have also found such generic, computer-implemented claims directed to abstract ideas. *See Twilio*, 249 F. Supp. 3d at 1145–46 (finding claim “directed to selecting the best message routing option based on separately-transmitted feedback” abstract because it “does not improve message routing technology itself”).⁵

3. Alice Step Two

The claims are silent as to what technologies or other mechanisms perform any of the recited steps, let alone *how* the steps are performed. Rather, they rely on a generic computer to perform routine activities such as receiving information, making selections and determinations—sometimes, but not always, using the received information—and sending information. They “do not even require a new source or type of information, [] new techniques for analyzing it,” or “any assertedly inventive programming.” *Elec. Power*, 830 F.3d at 1355. “Nothing in the claims, understood in light of the specification, requires anything other than off-the-shelf, conventional computer” components and technologies. *Id.*

Managed IT devices were well-known and conventional, and there are no improvements to such devices themselves recited in the claims. The specification alleges only incremental improvements to “conventional [IT] management methods and systems,” “conventional notification systems,” and “conventional IT management techniques” that used email to notify “an administrator should a problem arise” with an IT device and who “can then diagnose and resolve the problem.” ’215 Patent at 1:36–59, 2:52–62, 8:45–62. And the inventors did not claim any improved device or system. The only alleged “improvements” arguably reflected in the claims relate to requiring a response and using a known real-

⁵ See also *SmartGene, Inc. v. Advanced Biological Labs.*, SA, 555 F. App’x 950, 951, 954 (Fed. Cir. 2014) (computer implemented method for “guiding the selection of a therapeutic treatment regimen for a patient with a known disease or medical condition” was directed to an abstract idea); *Planet Bingo, LLC v. VKGS LLC*, 576 F. App’x 1005, 1006 (Fed. Cir. 2014) (claims to a computer-aided management system for bingo games was directed to an abstract idea).

time communication technology (instant messaging) to perform its well-understood functions. *Id.*⁶

Requiring a reply indicating acceptance of responsibility, like each of the individual limitations, “is itself an abstract concept” and cannot save the claims at step two. *ChargePoint, Inc. v. SemaConnect, Inc.*, 920 F.3d 759, 771 (Fed. Cir. 2019). Nor can the use of real-time communications, which is not recited in, and thus cannot provide an inventive concept for, Claims 5, 7, and 8. To be sure, Claims 14–16 specifically require the use of instant messaging, but the inventors readily admit that they did not invent instant messaging or any of the claimed functionalities of an instant messaging system. According to the specification, conventional off-the-shelf applications such as IBM’s “Lotus Sametime” or AOL’s instant messenger can be used to provide all the claimed benefits using conventional computer components. ’215 Patent at 4:57–65 (explaining that the “online awareness techniques . . . used by Lotus Sametime” may be used, and also incorporating an entire AOL patent on the subject by reference); *see also* 5:51–6:6, 8:26–36. Moreover, Quartz previously disclaimed Claims 1, 2, and 4 of the ’215 Patent to avoid institution of an *inter partes* review. Ex. 4 at 1. Quartz disclaimed Claim 4 of the ’215 Patent, returning the subject matter to the public. Because Claim 4 is nearly identical to Claim 16, Quartz’s disclaimer is a tacit admission that the use of existing instant messaging applications to perform their well-understood and intended functions is not inventive.

Finally, the ordered combination simply recites the concept of assigning responsibility for problems to someone qualified and available to respond, which is insufficient to render the claims eligible. *Alice*, 573 U.S. at 225; *PUREPREDICTIVE, Inc. v. H2O.AI, Inc.*, 2017 WL 3721480, at *7 (N.D. Cal. Aug. 29, 2017), *aff’d*, 741 F. App’x 802 (Fed. Cir. 2018).

V. CONCLUSION

For the above reasons, this Court should find the asserted claims patent-ineligible.

⁶ Claim 2 was the only claim that recited “real time” communication, which Quartz disclaimed in a prior IPR proceeding. Ex. 8 at 1.

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